

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method of producing a polyamide nanocomposite from a partially crystalline polyamide and an organically modified layered silicate, said partially crystalline polyamide being processed as a first part and a second part in a single extrusion procedure carried out in a double screw extruder having an intake,

wherein the method comprises the following steps:

(a) dosing said first part of the partially crystalline polyamide as a granulate into the extruder intake and melting said first part of the partially crystalline polyamide in the extruder,

(b) dosing into the double screw extruder and ~~mixing~~ admixing the organically modified layered silicate with the melt of step (a), in a mixture ratio in the melt of said first part of the partially crystalline polyamide of 60 to 80 wt.% polyamide and 40 to 20 wt.% layered silicate,

(c) adding said second part of the partially crystalline polyamide to the mixture of step (eb) in the double screw extruder via a side feeder or through dripping in the extruder to set the final concentration of the organically

modified layered silicate at no greater than 10 % in the melt of the polyamide nanocomposite, and

(d) subjecting the resulting melt of the polyamide nanocomposite to filtration, and

wherein all of said steps (a)-(d) are carried out in the single extrusion procedure in said double screw extruder.

2. **(Original)** The method according to Claim 1, characterized in that the filtration of the melt is performed directly before the extruder nozzle.

3. **(Cancelled)**

4. **(Previously presented)** The method according to Claim 1, characterized in that wire filters having a mesh width of at most 200  $\mu\text{m}$  are used to perform the melt filtration.

5. **(Previously presented)** The method according to Claim 4, characterized in that wire filters having a mesh width between 50  $\mu\text{m}$  and 100  $\mu\text{m}$  are used to perform the melt filtration.

6. (Currently amended) The method according to Claim 1,

characterized in that, with the addition of the organically modified layered silicate, a mixture ratio of 70 weight-percent of polyamide and 30 weight-percent of layered silicate is produced and the second part of the partially crystalline polyamide is added to the mixture in the quantity necessary in order to achieve the final concentration of 2.5 to 6 weight-percent of the layered silicate in the melt of the polyamide nanocomposite.

7. (Previously presented) The method according to Claim 1,

characterized in that the layered silicate is organically modified using phosphonium salts of the formula  $P-R_4-X$ ,  $R_4$  representing three alkyl or aryl residues and X being a Cl, Br, or I.

8. (Previously presented) The method according to Claim 1,

characterized in that the organically modified layered silicate is exfoliated and has an ultrafine grain having an average particle size in at least one dimension of at most 100 nm.

9. (Currently amended) The method according to Claim 1,

characterized in that the partially crystalline polyamide is selected from the group consisting of homopolyamides PA 6, PA 66, PA 46, PA 11 and PA 12.

10. (Previously presented) The method according to Claim 1,

characterized in that the partially crystalline polyamide is admixed with a component of amorphous polyamide.

11. (Previously presented) The method according to Claim 1,

characterized in that the organically modified layered silicate includes phyllosilicates of the three-layer type (2:1).

12. (Withdrawn) An injection-molded part, which is produced using a polyamide nanocomposite obtained according to the method according to Claim 1,

characterized in that it has a surface which has an average roughness value ( $R_a$ ) of less than  $0.05\ \mu\text{m}$  and/or has an average roughness depth ( $R_z$ ) of less than  $4\ \mu\text{m}$ .

13. (Withdrawn) The injection-molded part according to Claim 12,

characterized in that it includes a smooth surface having a high gloss produced by a molding tool polished to a high gloss.

14. (Withdrawn) A reflector for vehicle driving illuminators,

characterized in that it includes an injection molded part according to Claim 12 and is metallized directly.

15. (Withdrawn) A reflector for signal or street lights and/or a sub-reflector for vehicle driving illuminators,

characterized in that it includes an injection molded part according to Claim 12 and is metallized directly.

16. (Withdrawn) The reflector according to Claim 14, characterized in that the metal coating is applied through PVD methods.

17. (Previously presented) A method of manufacturing a reflector, comprising injection molding the polyamide nanocomposite of claim 1 as a molding compound into a reflector for vehicle driving illuminators.

18. **(Previously presented)** A method of manufacturing a reflector, comprising injection molding the polyamide nanocomposite of claim 1 as a molding compound into a reflector for signal or street lights or into a sub-reflector for vehicle driving illuminators.

19. **(Previously presented)** The method of Claim 17, characterized in that a gas injection molding technique is used during injection molding.

20. **(Withdrawn)** The reflector according to Claim 15, characterized in that the metal coating is applied through PVD methods.